

IN THE CLAIMS

Claims 1, 4-6, 8-11, and 16-17 are pending in this application, wherein claims 1, 4, 8, and 16 are being amended to improve form, as follows:

1. (Currently Amended) A server system for implementation within a communication system that includes a terminal control device, the server system comprising:

a processor ~~for issuing and guaranteeing~~that issues and guarantees a public key certification for a terminal device;

a memory ~~for holding~~that holds prefix allocation allow/prohibit information of ~~[[a]]the~~ terminal device, the prefix allocation allow/prohibit information indicating whether allocation of a prefix to the terminal device is allowed or prohibited; and

a communications interface ~~for receiving~~that receives a public key issue certification request from said terminal device, ~~and rewriting~~rewrites said prefix allocation allow/prohibit information, and communicates with a terminal control device to manage the terminal device and to manage location information of the terminal device, wherein

said processor ~~being structured~~is implemented to run a first routine in which the public key certification issue request is received from said terminal device, ~~wherein at the~~ public key certification of said terminal device is issued ~~by the server device~~, said prefix allocation allow/prohibit information is rewritten ~~by the server device~~, and said public key certification is sent to said terminal device ~~from the server device~~,

~~the communications interface communicates with a terminal control device for managing the terminal device and for managing location information of the terminal device,~~

said processor is ~~structured~~implemented to run a second routine in which an inquiry on whether prefix allocation is allowed or prohibited is received from said terminal control device, said prefix allocation allow/prohibit information is~~is~~ ~~searched by the server~~, and the prefix allocation allow/prohibit information acquired is~~is~~ ~~sent to said terminal control device from the server device~~, and

the terminal control device has a DHCP-PD function and allocates prefix information to the terminal device based on the prefix allocation allow/prohibit information using the DHCP-PD function.

2-3. (Canceled).

4. (Currently Amended) A terminal control device comprising:

a connection for communication with a server device ~~containing a function to that~~ issues and guarantees a public key certification for a terminal device[[,]] and that holds prefix allocation allow/prohibit information which indicates whether allocation of a prefix for the terminal device is allowed or prohibited;

a transceiver ~~for acquiring~~that acquires the public key certification from said server device; and

a storage that holds location information for the terminal device, wherein the terminal control device implements a routine to maintain security by utilizing IPsec technology, and a storage to store a terminal device location information, wherein through which information confirming [[the]]an identity of said terminal device is received from said terminal device, ~~and a terminal device~~the public key certification for the terminal device is acquired from said server device, wherein information allowing prefix allocation for said terminal device is loaded from said server device, and, if said server device approves allocation of [[a]]the prefix to said terminal device, ~~then the~~ prefix information is ~~reported~~allocated to said terminal device, and

the terminal control device has a DHCP-PD function and allocates the prefix information to the terminal device based on the information allowing prefix allocation for said terminal device using the DHCP-PD function, ~~and information confirming the identity of said~~ to enable the terminal device[[has]] to create a home address ~~creating in for~~ the terminal device [[from]]based on the prefix information and ~~the terminal~~ an interface identifier for a communication interface with the server device.

5. (Previously Presented) A terminal control device according to claim 4, further comprising:

an information processing device having a prefix allocation function,

wherein information confirming the identity of said terminal is received from said terminal device,

an inquiry for prefix information is made to said information processor device,
and

a reply to the inquiry that indicates that said prefix was allocated is made from
said information processor device,

then a reply to the information confirming said identity of the terminal is sent
to said terminal device from the transceiver.

6. (Original) A terminal control device according to claim 4,
wherein a location registration request or a binding update request is received
from said terminal device, and security information of said terminal device is loaded,
and if said request matches said security information, then location registration or
binding update of said terminal device is performed in the terminal control device.
7. (Canceled).
8. (Currently Amended) A terminal authentication method for a communication system
containing an information processor device with a prefix allocation function, ~~[[and]]a~~
server device ~~containing~~that contains a processor and a memory ~~[[to]]and that~~
guarantees and issues a public key certification for a terminal device, ~~[[and]]a visited~~
network to which the terminal device is implemented to connect, ~~and a terminal~~
~~device capable of connecting to said visited network, and a home network which is~~
associated with the terminal device~~[[,]]~~ and which is mutually connected with said
visited network, and a terminal control device connected to said home network via
said visited network, ~~wherein~~the terminal authentication method comprising:
said server device ~~issuing~~issues a public key certification to said terminal
device and ~~rewrites~~rewriting prefix allocation information for said terminal device;
said information processor device ~~receives~~receiving a prefix allocation request
from said terminal device, ~~and makes~~making an inquiry for prefix allocation
allow/prohibit information indicating whether allocation of a prefix is allowed or
prohibited to said server device, and ~~allocates~~notifies said terminal control device
prefix information to said terminal device whenupon allocation of the prefix
~~[[is]]being approved, the prefix allocation allow/prohibit information indicating~~
~~whether allocation of a prefix is allowed or prohibited;~~

said terminal control device ~~receives~~receiving information confirming the identity of the terminal device from said terminal device, allocating the prefix information to the terminal device based on the information allowing prefix allocation for said terminal device using a DHCP-PD function, and ~~[[sends]]~~sending the prefix information ~~[[of]]~~allocated to said terminal device to said information processor device;

said information processor device establishes a security association between the terminal device to which said prefix information is issued and said terminal control device;

~~the terminal control device has a DHCP-PD function and allocates prefix information using the DHCP-PD function; and~~

the terminal device creating~~creates~~ a home address from the prefix information and ~~the terminal~~ an interface identifier for a communication interface with the server device.

9. (Previously Presented) A terminal authentication method according to claim 8, wherein a communication device mutually connected to the home network and the visited network sends a prefix allocation request to said information processor device.
10. (Original) A terminal authentication method according to claim 9, wherein said terminal control device receives a location registration request from said terminal device, loads said security association, and approves location registration of said terminal device when said location registration request fulfills said security association.
11. (Previously Presented) A terminal authentication method according to claim 8, wherein

said terminal control device comprises a communication interface for communicating with said server device, and a storage device for storing public key certification information for a terminal device; and

said information processor device sends prefix information to a terminal device approved by said server device.

12-15. (Canceled)

16. (Currently Amended) A combination method for authentication and location registration of a terminal located in a visited network, the method comprising:

powering on a terminal device;

sending a router advertisement to the terminal device from a visited network router;

creating a care of address (CoA) in the terminal device;

sending a device authentication request to the visited network router;

sending a public key certification issue request with a public key and a terminal ID to a calling authority server (CA) over an IP protocol network;

issuing a public key certification issue response from the calling authority server (~~CA~~)-compatible with IPv6 protocol;

establishing an IPsec security association (SA), ~~[[and]]~~digital signature via IKE (internet key exchange), and a secure communication channel using phase I and II IPsec ISAKMP protocols between the terminal in the visited network and a home agent server which is linked to the calling authority server (CA) and which located in a home area;

making a location binding update in the terminal device using the IPsec security association (SA);

sending a request to check the public key certification to the calling authority server (CA) from the home agent server;

holding prefix allocation allow/prohibit information of ~~[[a]]~~the terminal device; ~~the prefix allocation allow/prohibit information indicating that indicates~~ whether allocation of a prefix is allowed or prohibited;

~~responding~~receiving a response from the calling authority server that indicates whether prefix allocation is allowed with a prefix and creating a home address for the terminal device;

discovering and obtaining a home address of the home agent server by the terminal device;

making a location binding update by the terminal device using a binding cache from the home agent server; and

thereby providing an authentication method for verifying a terminal authenticity by linking a digital signature method with a location binding update method, wherein

the terminal control device has a DHCP-PD function and allocates prefix information to the terminal device based on the prefix allocation allow/prohibit information using the DHCP-PD function, and

the terminal creates ~~[[a]]~~the home address from the prefix information and ~~the terminal~~ an interface identifier for a communication interface with the calling authority server.

17. (Previously Presented) A communication system according to claim 1, wherein said terminal creates a home address from said prefix information and a terminal interface identifier.